

# ***Telesonix jamesii* (James' telesonix)**

## **Species Conservation Assessment Update**

**Title of Assessment:** *Telesonix jamesii* (Torr.) Raf. (James' telesonix): A Technical Conservation Assessment, USDA Forest Service, Rocky Mountain Region

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**Update Summary:** The original technical conservation assessment reports that *Telesonix jamesii* is known from Wyoming, Colorado, and New Mexico, with nineteen occurrences in Colorado, and only unverified occurrences in Wyoming and New Mexico. This species is now considered to only be known from Colorado and "one mountain area" in New Mexico (USDA NRCS 2006, NatureServe 2006). Five of the nineteen occurrences reported from Colorado can be lumped into three occurrences (Colorado Natural Heritage Program 2006). I also found documentation for six "new" occurrences that were not reported in the original assessment (including at least four historical records). This brings the total number of known occurrence to 22. In February of 2005 NatureServe (2006) changed the global rank of *T. jamesii* to G2; the state rank of S2 in Colorado remains unchanged. The information provided in the original assessment and this update support G2/S2 as accurate ranks for this globally imperiled species. The new locations reported herein do not expand the county distribution for *T. jamesii*, and do not change what is known about the habitat, associated species, or conservation issues for this species. One location does expand the known elevation range slightly, from 6800 to 6700 feet at the lowest elevations for *T. jamesii*. All of the new locations are possibly on the Pike San Isabel National Forest, but may wholly contain or partly include private lands or another land management status. Most of the information on the new occurrences is sparse and out of date, and additional field work is warranted to expand what is known about these locations. *Telesonix jamesii* has not yet been documented on Bureau of Land Management or Department of Defense lands as indicated in the original assessment. *Telesonix jamesii* is listed as being for sale in three on-line nursery catalogs that report that the plants or seeds were collected in the wild in Colorado, which adds to concerns about the potential threats to this species from collecting for the horticultural trade.

**Distribution:** New Information Provided

**References:** New References Provided

**Taxonomic Status:** Unchanged

**Agency Status:** Unchanged

**Significance of Changes Relative to Original Assessment:** New information available for *Telesonix jamesii* does not require significant changes to the assessment for this species. Since the publication of this species assessment *T. jamesii* was ranked G2 and five "new" locations (previously documented but not reported in the original assessment) were discovered. However, most of the information cited in the assessment remains unchanged, and the threats to *T. jamesii* have not abated. Thus, the discussion of threats and conservation in the assessment is still relevant. The nature of new information suggests that a rewrite of this assessment is not needed at this time. As additional new information becomes available in the future, the assessment will need to be updated.

## Positive Findings of New or Updated Information and Their Sources

(Note: The Table A checklist attached to this update provides a summary of all sources consulted)

### Source 1

NatureServe. 2006. NatureServe Explorer: An online encyclopedia of life [web application]. Version 5.0. NatureServe, Arlington, Virginia. Available <http://www.natureserve.org/explorer>. (Accessed: August 17, 2006).

#### ***Summary of New Information***

The global rank of *Telesonix jamesii* was updated to G2 from G2G3 on February 4, 2005 based on its narrow distribution in Colorado and only being known from “one mountain area” in New Mexico. Information provided on the PLANTS database (USDA, NRCS 2006) agrees with this treatment, reporting that *T. jamesii* is only found in Colorado and New Mexico. The state distribution map of New Mexico (USDA, NRCS 2006) shows that this species is only known from San Miguel County in the northeastern part of the state.

#### ***Relevant Sections of the Conservation Assessment Affected by the Updates***

Summary of Key Components for Conservation, Management Status, Distribution.

### Source 2

Norbury, F. 2006. Forest Service Handbook, National Headquarters (WO) Washington, DC, Land Management Planning Handbook, Chapter 40--Science and Sustainability, Amendment No.: 1909.12-2006-5. Effective Date: January 31, 2006.

#### ***Summary of New Information***

This amendment describes the new planning rules and how the USFS will handle “Species of Concern” and “Species of Interest”, rather than Sensitive Species. Presumably, *Telesonix jamesii* could be considered a Species of Concern. The amendment states that species ranked G1-G3 by NatureServe will likely fall into this category. Individual forests will need to identify Species of Concern and Species of Interest as they develop new Forest Management Plans. Forests that have recently completed their planning process will follow the old rules, including use of the most recent Sensitive Species list (Cables 2006), until their next plan revision, typically after the plan is 10-15 years old (Kratz personal communication 2006). The Pike-San Isabel National Forest, which is known to support *T. jamesii* is just starting their Forest Plan revisions, and will need to follow the new planning rules.

Biological evaluations will not necessarily be conducted for known or potential locations of Species of Concern or Species of Interest. In many cases the locations of these species will be covered under “ecosystem provisions” written into the Forest Plans. For example, the provisions may state that as long as forested areas are managed to allow for a normal historic range of variation the species ought to be fine (Kratz personal communication 2006).

#### ***Relevant Sections of the Conservation Assessment Affected by the Updates***

Summary of Key Components for Conservation, Management Status, Existing Regulatory Mechanisms

### Source 3

Arrowhead Alpines. 2006. 2006 Perennials and Rock Plants. Fowlerville, Michigan. Accessed via the World Wide Web at <http://www.arrowhead-alpines.com/index.htm>.

#### ***Summary of New Information***

*Telesonix jamesii* plants are listed as being for sale in this 2006 on-line catalog for \$6.50 each. The plants are reported to be collected from crevices in granite at 12,600 feet in Teller County, Colorado.

Numerous nursery websites list *Telesonix jamesii* for sale. However, because of recent taxonomic revisions, the plants for sale on some of the sites could actually be *T. heucheriformis*. This web site (Source 3) and the two following (Sources 4 and 5) specify that the plants or seeds were collected in Colorado, and are therefore surely *T. jamesii*. Research is needed to determine the impacts of the horticultural trade on *T. jamesii*.

***Relevant Sections of the Conservation Assessment Affected by the Updates***

Conservation: Threats: Collection for horticultural trade, Information Needs and Research Priorities.

**Source 4**

Evermay Nursery. 2006. 2006 on-line catalog. Old Town, Maine. Accessed via the world wide web <http://www.evermaynursery.com/index.asp>.

***Summary of New Information***

*Telesonix jamesii* is listed as being for sale but “out of stock”. Seeds are reported to have been collected in Teller Co., Colorado at 12,600 feet. Research is needed to determine the threat that this collecting poses to *T. jamesii*.

***Relevant Sections of the Conservation Assessment Affected by the Updates***

Conservation: Threats: Collection for horticultural trade, Information Needs and Research Priorities.

**Source 5**

Sunscapes Rare Plant Nursery. 2006. 2006 Catalog. Pueblo, CO. Accessed via the World Wide Web at <http://www.sunscapes.net/Pages/Catalog.htm>.

***Summary of New Information***

*Telesonix jamesii* is listed as being for sale. Plants are reported to be from El Paso Co., Colorado, and a photograph of a plant is available. Research is needed to determine the threat that this collecting poses to *T. jamesii*.

***Relevant Sections of the Conservation Assessment Affected by the Updates***

Conservation: Threats: Collection for horticultural trade, Information Needs and Research Priorities.

**Additional Information (Summary of New Information):**

*Telesonix jamesii* is known from at least 22 locations within an approximately 117 by 32 mile range in Larimer, Jefferson, El Paso, Teller, and Park counties, Colorado (Original Assessment, and Table 1 and Figure 1 with this update). The species is also reported from a mountain area in northeast New Mexico (NatureServe 2006, USDA, NRCS 2006). Further inventory work is warranted to determine the full range of *T. jamesii*.

I examined the records presented in the original assessment and determined that some of the occurrences should be lumped together because they were in such close proximity to each other. The first two occurrences listed in original assessment in Table 1 appear to have been documented less than one mile apart in the same drainage at different elevations. These are occurrences number 2 and 3 in the Colorado Natural Heritage Program (CNHP) database. Likewise, the fifth, sixth, and eighteenth records listed in the original assessment in Table 1 (CHNP occurrence numbers 7, 14, and 15) are also in close enough proximity to be considered one record. This reduces the total number of occurrences reported in the original assessment from 19 to 16 occurrences.

I also found records for six additional locations that were not referenced in the original assessment (University of Colorado Museum Herbarium, Carter Herbarium at Colorado College, Ripley 1994). These are summarized in Table 1 of this update.

*Telesonix jamesii* has not yet been documented on Bureau of Land Management or Department of Defense lands as indicated in the original assessment. Some of the location data available for this species provide rather vague directions. These records are mapped by the Colorado Natural Heritage Program with large polygons to reflect the imprecise nature of the data. Unfortunately, the large polygons are often misinterpreted to reflect large areas where the species is known. Additional field surveys are needed to better document the true occurrence boundaries.

In conclusion, available data suggests that *Telesonix jamesii* is a globally imperiled species (G2) which should be considered for US Forest Service Sensitive Species status and Species of Concern status in the Pike San Isabel National Forest Management Plan. Nonetheless, field inventories are warranted to determine the full range and vulnerability of this species.

### ***Relevant Sections of the Conservation Assessment Affected by the Updates***

Summary of Key Components for Conservation, Distribution, Species inventory, Research priorities, Table 1, and Figure 1.

#### **References:**

- Cable, R. 2006. Forest Service Manual, Rocky Mountain Region (Region 2), Denver, Colorado, Wildlife, Fish, And Sensitive Plant Habitat Management, Chapter 2670 – Threatened, Endangered And Sensitive Plants And Animals, Supplement No.: 2600-2006-1, Effective Date: May 3, 2006.
- Colorado Natural Heritage Program. 2005. Biodiversity Tracking and Conservation System. Colorado State University, Fort Collins, CO.
- Kratz, A. 2006. Personal communication with USFS Region 2 Botanist regarding the USFS Species of Concern status.
- Mihlbachler, B.S. 2006. Personal communication with U.S. Fish and Wildlife Service Range & Wildlife Biologist regarding locations for *Telesonix jamesii* near the US Air Force Academy in Colorado Springs, CO.
- NatureServe. 2006. NatureServe Explorer: An online encyclopedia of life [web application]. Version 5.0. NatureServe, Arlington, Virginia. Available <http://www.natureserve.org/explorer>. (Accessed: August 17, 2006 ).
- Ripley, J.D. 1994. Vegetation of the United States Air Force Academy and the adjacent regions of the Pike National Forest, El Paso County, Colorado. Unpublished report prepared for the Department of Biology, U.S. Air Force Academy.
- USDA, NRCS. 2006. The PLANTS Database (<http://plants.usda.gov>, 21 August 2006). National Plant Data Center, Baton Rouge, LA 70874-4490 USA.
- University of Colorado Museum Herbarium. 2006. Specimen Database accessed via the World Wide Web at <http://cumuseum.colorado.edu/Research/Botany/Databases/search.php> on August 21, 2006.

### **Additional Unabstracted Sources – *pre*-Assessment**

**(citations pre-dating Assessment publication that were not referenced in it).**

None.

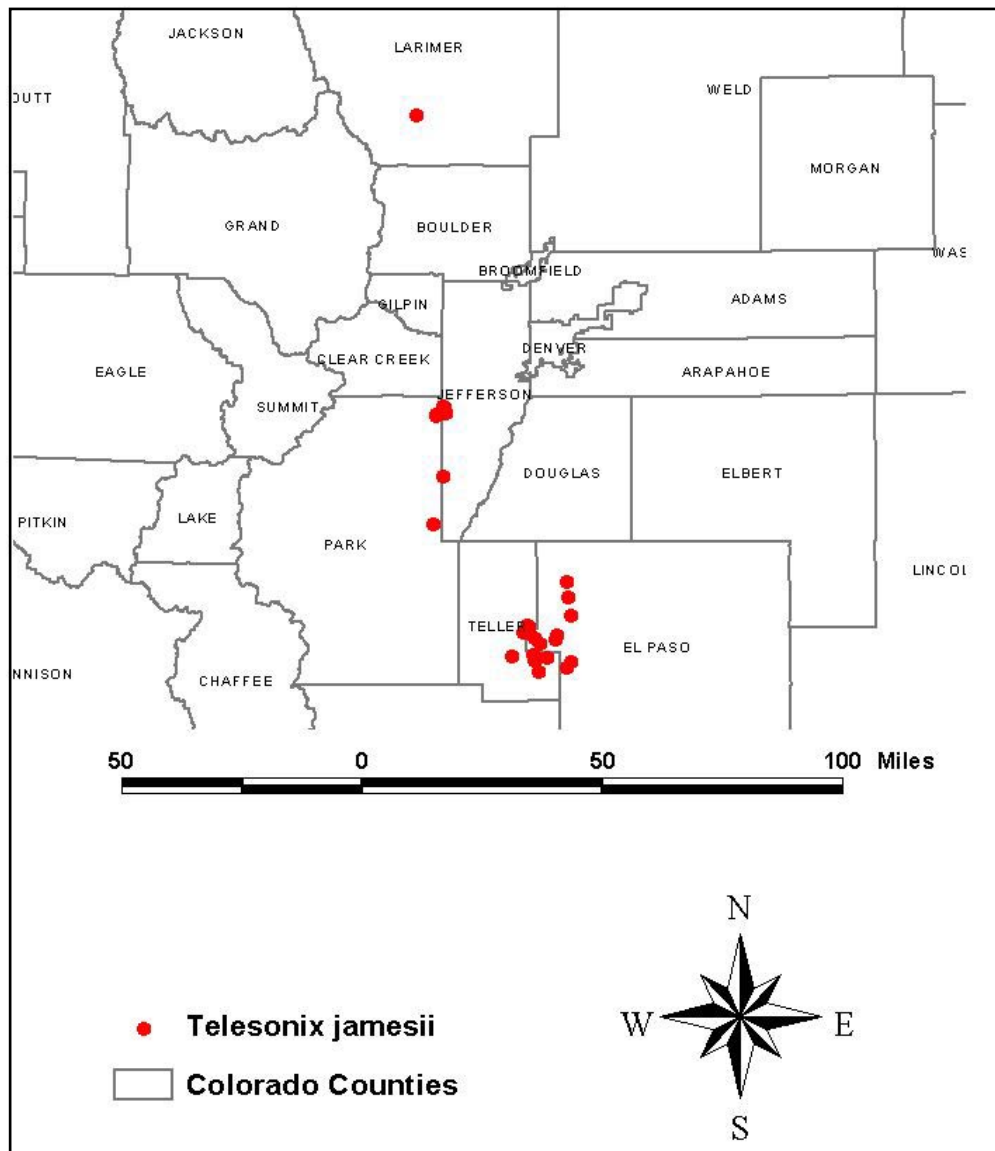
### **Additional Unabstracted Sources – *post*-Assessment**

**(citations post-dating Assessment publication that refer to the target genus but were determined by the reviewer to contain no information requiring an update of the original assessment)**

None.

**Table 1.** Information on five of the 21 known occurrences of *Telesonix jamesii* in Colorado. This information is intended to add to and update Table 1 in the original Technical Conservation Assessment (Beatty et al. 2004). Location names are provided as a useful reference rather than to identify a specific place on the ground.

County (location)	Date of Observations	Estimated Abundance	Management Area/Ownership	Elevation Range (ft)	General Habitat Description	Associated Plant Species	Element Occurrence Rank	Source
El Paso (Goat Camp Creek)	7/11/1979	Not provided	Pike San Isabel NF	8,600 feet	Not provided	None listed	H	Ripley 1994; Muhlbacher personal communication 2006.
El Paso (Blodgett Peak)	Pre-1994 Collection date not reported	Not provided	Pike San Isabel NF	9,400 feet	Not provided	None listed	Not enough information to assign rank	Ripley 1994; Muhlbacher personal communication 2006.
El Paso (Queens Canyon)	7/14/1999	Several plants	Pike San Isabel NF	6,700 feet	Growing on granite shelf in partial sun.	None listed	C	Kelso, Maentz, and Hall collection # 26199 housed at the Colorado College Carter Herbarium.
Jefferson ("The Castle")	June 22, 1976	Locally abundant	Private and possibly Pike San Isabel NF	Approximately 8,000 to 8,200 feet	On tors of Pikes Peak Granite, lower slopes of spurs.	None listed	H	Weber and Klockenbrink specimen housed at the University of Colorado Herbarium.
Teller (location name not available, only TRS provided)	9/14/1977	Not provided	Pike-San Isabel NF and possibly private	9,700 feet	Moist shady rock crevasses in the subalpine.	None listed	H	Bails collection #40, specimen housed at the Colorado College Carter Herbarium.
Teller (Gillette)	7/13/1935	Not provided	Private and possibly Pike San Isabel NF and or BLM	10,500	Not provided	None listed	H	Penland collection # 1270 at Colorado College Carter Herbarium.



**Figure 1.** Distribution of *Telesonix jamesii* in Region 2. Globally, this species is only known from one other area in northeastern New Mexico. Occurrences are found on National Forest System lands (Pike-San Isabel National Forest), State lands, and private lands. The occurrences in Larimer County are in Rocky Mountain National Park. Occurrences may be represented by more than one dot (these are considered to be sub-occurrences). This figure is provided as an update to Figure 1 presented in the original assessment.

# **Checklist of Sources Consulted for Updates to the *Telesonix jamesii* Conservation Assessment**

## **Guidelines for Producing Updates**

Sources of information relevant to review of this Technical Conservation Assessment for updates include databases, experts, personal communications, published and unpublished literature. Positive results are discussed in detail in the Summary of Addendum to the Technical Conservation Assessment.

Internet Literature Searches: The minimal search for each update consists of Google Scholar, Federal Register, plus a minimum of three other available online literature databases. Search terms include at a minimum: species common name, genus, and recent synonyms. Other keywords will be used at the discretion of the reviewer (e.g., passerine, wetland, rodent). Searches will be constrained to the time beginning two years prior to publication of the Technical Conservation Assessment to the present.

Experts and agency personnel should be contacted for any additional new information.

**Table A.** Sources of information consulted for updates to the Species Conservation Assessment.

<b>Source Category</b>	<b>Source/ Name</b>	<b>Date</b>	<b>Results</b>
Announcement from R2 to all FS personnel (including species list)			No announcement was made
Internet based literature databases	Google	8/15/06	Search terms: Telesonix jamesii- 245 hits, I checked all. New information regarding plants for sale at three nurseries. References 3, 4, and 5.
	Google Scholar	8/17/06	Search term: Telesonix jamesii. 26 hits. No new information.
	Google Book Search	8/17/06	No new sources for search term: Telesonix jamesii
	Federal Register	8/17/06	No new sources for search term: Telesonix
	CSU Library Catalog	8/17/06	No new sources for search term: Telesonix
	Prospector	8/17/06	No new sources for search term: Telesonix
	Scopus	8/17/06	No new sources for search term: Telesonix
	Web of Science	8/17/06	No new sources for search terms: Telesonix.
	Agricola	8/17/06	No new sources for search term: Telesonix.
	Biological Abstracts	8/17/06	No new sources for search term: Telesonix.
	WorldCat Dissertations and Theses Database	8/17/06	No new sources for search term: Telesonix jamesii
NatureServe affiliate program databases and personnel	Colorado Natural Heritage Program database and others	8/21/06	Occurrence data from Colorado College Herbarium housed at CNHP.
State Agency Personnel	Brian Kurzel	8/14/06	No new information
Federal Agency Personnel	Steve Olson, Pike San Isabel National Forest	8/9/06	No new information
	Jeff Connor, Rocky Mountain National Park	8/17/06	No new information
Primary experts			No further experts contacted



Source Category	Source/ Name	Date	Results
Museums and Herbaria	University of Colorado (COLO)	8/15/06	No new specimens
	Colorado State University (CS)	8/15/06	No new specimens
	Denver Botanic Gardens	8/15/06	<i>Telesonix jamesii</i> not in database. Email sent requesting data.
Original Author-William Jennings		8/15/06	No new information

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